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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,046	05/09/2006	Minerva M. Yeung	P17841	6276

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INTEL CORPORATION
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MINNEAPOLIS, MN 55402

EXAMINER

STONE, ROBERT M

ART UNIT	PAPER NUMBER
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2629

NOTIFICATION DATE	DELIVERY MODE
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01/06/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/579,046	Applicant(s) YEUNG ET AL.	
	Examiner Robert M. Stone	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-10 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-10 and 12-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 13 October 2010 has been entered and considered by the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 6, 7, 9, and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Blume* (US 2004/0021648) in view of *Reynar* (US 2002/0029304) and *Smith* (US 2002/015225).

As to **claim 1**, *Blume* (Figs. 1-8b) discloses a method of associating a selected object on any pre-existing printed material to a valid response provided by a computer system comprising (book enhancing system providing audio/video feedback corresponding to pre-existing printed books according to the point selected by user via an electronic pen [abstract, 0002, 0010, 0025]):

determining a position of an electronic pen on a page of the pre-existing printed material (determines the point of contact of the electronic pen 16,16a on the pre-existing printed books to provide corresponding feedback [abstract, 0010,

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0025, 0027, 0029-0031]), wherein the pre-existing printed material has not been modified for use with the computer system and the electronic pen (book enhancing system is for use with conventional books and publications that have not been specifically modified for the system [0004, 0008, 0025]);

transmitting the position to the computer system (output device 18 is the computer system which receives the XY location data corresponding to the point of contact of the electronic pen with the printed material [0029, 0032, 0041]);

correlating the position to selected content associated with the printed material (determines the XY location of contact and determines the corresponding printed material at that location in order to provide audio/video feedback [abstract, 0002, 0010, 0025, 0029-0031]), the selected content being accessible by the computer system (audio/video and/or controls are played back by the computer output device 18 [0029, 0033]); and

providing a valid response to a user based at least in part on the position and the correlated content, wherein the valid response includes performing an action by the computer system (based on the position of the users selection, the system provides corresponding audio/video and/or controls via computer output device 18 [0029, 0033]).

Blume does not expressly disclose wherein performing the action comprises reading an action identifier uniquely associated with the selected action from an action library, actions being classified into groups with each group

comprising a dynamic link library (DLL), and calling an application program interface (API) corresponding to the action identifier.

Reynar (Figs. 1, 2, 8) discloses a program interface in which performing an action comprises reading an action identifier uniquely associated with the selected action from an action library (the desired action [0035] to be performed is identified by its action identifier within the library of available actions [0126]), actions being classified into groups with each group comprising a dynamic link library (DLL) (action types are classified in dynamic link library databases [0029]), and calling an application program interface (API) corresponding to the action identifier (after determining the type of action according the action identifier, the Action DLL communicates with the action plug-ins 225 and the application program module 205 to perform the desired action [0029, 0034, 0035]).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have performed the actions using DLLs and APIs as taught by *Reynar* in the electronic apparatus of *Blume*. The suggestion/motivation would have been to provide a library or external repository of program actions to parent programs/applications and allow the software to manipulate itself or the hardware as desired.

Blume in view of *Reynar* does not expressly disclose the actions including at least one of adjusting the volume of a speaker, adjusting the brightness of a computer monitor, and powering off the computer system.

Smith discloses providing an API which allows control of actions including at least one of adjusting the volume of a speaker, adjusting the brightness of a computer monitor, and powering off the computer system (API functions include setting system parameters such as brightness for the display and volume [0056]).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided system functionality such as volume and brightness control as taught by *Smith* in the electronic apparatus of *Blume* as modified by *Reynar*. The suggestion/motivation would have been to provide the user the ability to customize his/her system settings to increase user pleasure.

As to **claim 7**, *Blume* (Figs. 1-8b) discloses an article comprising:

a storage medium having a plurality of machine accessible instructions (computer system memory houses instructions for interpreting the location signals of a pen and interacting accordingly [0042, 0043]), wherein when the instructions are executed by a processor, the instructions provide for associating a selected object on any pre-existing printed material to a valid response provided by a computer system (signaling instructions of the electronic pen 16,16a are interpreted by processor in unit 18 providing audio/video feedback corresponding to pre-existing printed books according to the point selected by user via the electronic pen [abstract, 0002, 0010, 0025]) by determining a position of an electronic pen on a page of the pre-existing printed material (determines the point of contact of the electronic pen 16,16a on the pre-existing printed books to provide corresponding feedback [abstract, 0010, 0025, 0027,

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0029-0031]) wherein the pre-existing printed material has not been modified for use with the computer system and the electronic pen (book enhancing system is for use with conventional books and publications that have not been specifically modified for the system [0004, 0008, 0025]);

transmitting the position to the computer system (output device 18 is the computer system which receives the XY location data corresponding to the point of contact of the electronic pen with the printed material [0029, 0032, 0041]);

correlating the position to selected content associated with the printed material (determines the XY location of contact and determines the corresponding printed material at that location in order to provide audio/video feedback [abstract, 0002, 0010, 0025, 0029-0031]), the selected content being accessible by the computer system (audio/video and/or controls are played back by the computer output device 18 [0029, 0033]); and

providing a valid response to a user based at least in part on the position and the correlated content, wherein the valid response includes performing an action by the computer system (based on the position of the users selection, the system provides corresponding audio/video and/or controls via computer output device 18 [0029, 0033]).

Blume does not expressly disclose wherein performing the action comprises reading an action identifier uniquely associated with the selected action from an action library, actions being classified into groups with each group

comprising a dynamic link library (DLL), and calling an application program interface (API) corresponding to the action identifier.

Reynar (Figs. 1, 2, 8) discloses a program interface in which performing an action comprises reading an action identifier uniquely associated with the selected action from an action library (the desired action [0035] to be performed is identified by its action identifier within the library of available actions [0126]), actions being classified into groups with each group comprising a dynamic link library (DLL) (action types are classified in dynamic link library databases [0029]), and calling an application program interface (API) corresponding to the action identifier (after determining the type of action according the action identifier, the Action DLL communicates with the action plug-ins 225 and the application program module 205 to perform the desired action [0029, 0034, 0035]).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have performed the actions using DLLs and APIs as taught by *Reynar* in the electronic apparatus of *Blume*. The suggestion/motivation would have been to provide a library or external repository of program actions to parent programs/applications and allow the software to manipulate itself or the hardware as desired.

Blume in view of *Reynar* does not expressly disclose the actions including at least one of adjusting the volume of a speaker, adjusting the brightness of a computer monitor, and powering off the computer system.

Smith discloses providing an API which allows control of actions including at least one of adjusting the volume of a speaker, adjusting the brightness of a computer monitor, and powering off the computer system (API functions include setting system parameters such as brightness for the display and volume [0056]).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have provided system functionality such as volume and brightness control as taught by *Smith* in the electronic apparatus of *Blume* as modified by *Reynar*. The suggestion/motivation would have been to provide the user the ability to customize his/her system settings to increase user pleasure.

As to **claim 12**, *Blume* (Figs. 1-8b) discloses a system for associating a selected object on any pre-existing printed material to a valid response provided by a computer system (book enhancing system providing audio/video feedback corresponding to pre-existing printed books according to the point selected by user via an electronic pen [abstract, 0002, 0010, 0025]) comprising:

a pointing device to determine a position on the pre-existing printed material (determines the point of contact of the electronic pen 16,16a on the pre-existing printed books to provide corresponding feedback [abstract, 0010, 0025, 0027, 0029-0031]) wherein the pre-existing printed material has not been modified for use with the computer system and the pointing device (book enhancing system is for use with conventional books and publications that have not been specifically modified for the system [0004, 0008, 0025]);

a communicating device to transmit the position to the computer system (output device 18 is the computer system which receives the XY location data corresponding to the point of contact of the electronic pen with the printed material via a wireless or wired method [0029, 0032-0033, 0041]);

a player component to correlate the position to selected content associated with the printed material (determines the XY location of contact and determines the corresponding printed material at that location in order to provide audio/video feedback via speakers and/or display [abstract, 0002, 0010, 0025, 0029-0031]), the selected content being accessible by the computer system (audio/video and/or controls are played back by the computer output device 18 [0029, 0033]); and

to provide a valid response to a user based at least in part on the position and the correlated content, wherein the valid response includes at least one of executing complex logic behavior based on previous inputs to the computer from a user, and performing an action by the computer system (prior to performing complex logic behavior of text identification, definition lookup, and translation display for your desired language, the tap and/or gesture inputs from the user must be sent to computer 18/80 containing a microprocessor which also uses complex logic to identify the user's location and desired action [0041,0043,0048]. Further, complex logic behavior regarding interaction with books of differing languages according to your desired language with translations is taught [0048,0051]. Further still, complex logic must be performed for OCR to scan,

recognize, and compare the desired text to that the user has selected [0049-0050]. It should also be noted that complex logic must be used to determine the user's previous input position and subsequently check a database to determine the appropriate content to be presented [0002, 0010, 0025, 0029]).

As to **claims 3 and 9**, *Blume* discloses wherein correlating the position comprises searching a printed material database, the printed material database comprising positional information of objects on the pages (detected contact position is compared to a database of location specific functions in order to determine which specific feedback is desired for that contact location [0029, 0041-0043, 0046, 0049]).

As to **claims 6 and 16**, *Blume* (Fig. 1) discloses wherein the pre-existing printed material comprises a traditional paper book [0002, 0008, 0025].

As to **claim 13**, *Blume* (Figs. 1-4) discloses wherein the pointing device comprises an electronic pen (pen 16, 16a).

As to **claim 14**, *Blume* further discloses a holder structure to hold the pre-existing printed material in a fixed relationship to the pointing device (alignment guides 27 or a frame 90 is used to keep the book in a fixed position [0038-0040]).

As to **claim 15**, *Blume* discloses a multimedia database to store digital multimedia content, a printed material content database to store positional information about objects on the pages and linkage information between the objects and at least one of the multimedia contents and actions, and an action library to store directives for actions to be performed on the system (database of

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audio/video responses and location specific functions is searched in order to determine which specific feedback is desired for that contact location [0029, 0041-0043, 0046, 0049]).

4. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Blume* (US 2004/0021648) in view of *Reynar* (US 2002/0029304), *Smith* (US 2002/015225), and *Wood* (US 6,414,673).

Blume discloses determining the position of an electronic pen situated near the pre-existing printed material (determines the point of contact of the electronic pen 16,16a on the pre-existing printed books to provide corresponding feedback [abstract, 0010, 0025, 0027, 0029-0031]).

Blume in view of *Reynar* and *Smith* does not expressly disclose determining position using ultrasound signal timing information.

Wood discloses a method for ultrasound signal timing information along with ultrasound sensors near a moving pen on a material being printed (Col. 13 Ln. 14 – 22; Figs. 9 & 17).

At the time of invention, it would have been obvious for a person of ordinary skill in the art to have used ultrasound for position detection as taught by *Wood* in the book enhancing system of *Blume* as modified by *Reynar* and *Smith*. The suggestion/motivation would have been to increase accuracy for the position of the moving pen and also to provide “a means for communicating supplementary information between a transmitter pen and external receivers...” [col. 2 Ln. 59 – 63].

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5. Claims 4, 10, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Blume* (US 2004/0021648) in view of *Reynar* (US 2002/0029304), *Smith* (US 2002/015225), and *Amano* (US 2004/0119696).

Blume discloses an electronic book enhancing system for interaction with pre-existing printed material providing additional entertainment, learning, and other features including foreign language support and translation ([0007,0051]).

Blume in view of *Reynar* and *Smith* does not expressly disclose a language selection feature to be used for subsequent responses.

Amano discloses a language selection feature use for responses for the input of the user on figs. 13 & 14 ([0048 – 0052]).

At the time of invention, it would have been obvious for one of ordinary skill in the art to have provided a language selection as taught by *Amano* in the book enhancing system of *Blume* as modified by *Reynar* and *Smith*. The suggestion/motivation would have been to improve the learning experience of all users with a different cultural/lingual background [0051].

Response to Arguments

6. Applicant's arguments with respect to newly amended independent claims 1 and 12 and claims dependent thereon have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. *Delo* (US 6,378,127) discloses the use of action identifiers, dynamic link libraries, and application program interfaces to control software interaction with devices.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Stone whose telephone number is (571)270-5310. The examiner can normally be reached on Monday-Friday 9 A.M. - 4:30 P.M. E.S.T. (alternate Fridays off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh D. Nguyen can be reached on (571)272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert M Stone/
Examiner, Art Unit 2629

/Chanh Nguyen/
Supervisory Patent Examiner, Art
Unit 2629